

FAMILY—MÆNIDÆ.

1. GERRES GULA. *Cuv. et Val.?*

Gerres Gula, *Cuv. et Val.* Hist. des Poiss. tom. vi. p. 349.

FORM.—Greatest depth one-fourth of the entire length. Back but little elevated. Space between the eyes flat, with a fovea in the middle, which is prolonged in a channel nearly to the extremity of the snout. Length of the head exceeding its depth by one-fourth, and contained about three times and three quarters in the entire length. So much of the maxillary as is visible is of an oval form, its length being twice its breadth at its posterior extremity. Suborbital with the lower margin very indistinctly notched, and not denticulated. Eyes very large, their diameter contained twice and three quarters in the length of the head. The two orifices of the nostrils of nearly equal size. No denticulations on any of the pieces of the gill-cover. A narrow band of very minute velutine teeth in each jaw, those above hardly visible to the eye, but sensible to the touch: none on the vomer, palatines, or tongue.

Dorsal with the first spine extremely short; the second has a small piece broken off at the tip, but appears to have been about the same length as the third, which last equals two-thirds of the depth of the body; the fourth and fifth are a little shorter than the third; the succeeding ones gradually decreasing, as in the other species of this genus: all the spines are moderately slender, the anterior ones slightly arcuate, with scarcely any appreciable difference in the degree of stoutness in the first four. Anal with the first spine extremely short; the second obviously stouter than any of the dorsal spines, but much shorter, being only half the length of the second dorsal spine, or one-third the depth of the body; the third spine is a trifle longer than the second, but much slenderer. Caudal deeply forked; the lobes worn at the tips in this specimen, but their length, when perfect, probably about one-fourth, or somewhat less, of the entire length of the fish. Pectorals narrow and pointed, a little shorter than the head, and contained four and a half times in the entire length; fifth ray longest. Ventrals a little behind the pectorals, and not more than two-thirds their length, or scarcely so much; the spine a little shorter than the soft rays, and of about the same degree of stoutness as the dorsal spines. Elongated scale in the axillæ of the ventrals about three-fourths the length of the spine, of a narrow lanceolate form, ending in a very fine point.

D. 9/10; A. 3/7; C. 17, &c.; P. 14; V. 1/5.

Length 3 inc. 6 lines.

COLOUR.—Not noticed in the recent state. In spirits, it appears of a uniform silvery, with the back and upper part of the sides inclining to dusky olive: no bands or any particular markings: fins pale.

Habitat, Rio de Janeiro.

The species of this genus are numerous, and extremely similar to each other. Many of them appear to rest on characters taken simply from the relative lengths and degrees of stoutness of the dorsal and anal spines. This renders it extremely difficult to identify single specimens. Perhaps I am wrong in referring the one described above to the *G. Gula* of Cuvier and Valenciennes; but it makes so near an approach to that species, that I hardly dare characterize it as distinct. It cannot be the *G. Aprion* of those authors, which is closely allied to the *G. Gula*, and is found on the same coasts, since its teeth are so very much finer: the caudal also is not scaled. It is small, but Cuvier and Valenciennes state that none of their specimens of the *G. Gula* exceed five inches. Mr. Darwin took it in a salt-water lake, Lagoa de Boacica, at Rio de Janeiro.

2. GERRES OYENA. *Cuv. et Val.?*

Gerres Oyena, *Cuv. et Val.* Hist. des Poiss. tom. vi. p. 355.

Smaris Oyena, *Rüppell*, Atlas zu der Reise im Nörd. Afr. Zoologie; p. 11. tab. 3. fig. 2.

FORM.—Greatest depth contained rather more than three and a half times in the entire length: the dorsal curve very regular. Profile above the eyes a little concave. Length of the head exceeding its depth. Maxillary as in the species last described. Suborbital with its lower margin distinctly but not very deeply notched; not denticulated. Diameter of the eye less than one-third the length of the head. Posterior orifice of the nostrils twice the size of the anterior one. No denticulations on any part of the head or gill-cover. A narrow band of velutine teeth in each jaw, of about the same length and degree of fineness above and below; but none on the palate or tongue.

The dorsal commences in an exact vertical line with the insertion of the ventrals: the anterior spines are a little arcuate; the first, as in the other species of this genus, is extremely short; the second and third in this specimen are broken at their extremities so that their exact length cannot be ascertained, but the portion of the second remaining (and of this spine apparently only a very small piece is gone) nearly equals half the depth of the body; length of the fourth spine which is perfect not quite equalling two-fifths of the depth; fifth, sixth, and seventh spines gradually decreasing; eighth and ninth scarcely shorter than the seventh: the second spine is much compressed, and though obviously stronger than any of those which follow, not nearly so stout as in many other species; its breadth is not more than one-twelfth of its length. Anal commencing in a line with the fourth soft ray of the dorsal; the second spine compressed similarly to the second dorsal spine, and of about the same degree of stoutness, but its length one-third less, being just equal to one-third the depth of the body; the third spine scarcely shorter than the second, but much slenderer; the soft rays gradually decreasing from the first, which is a little shorter than the third spine, to the last but one, the last itself slightly prolonged